

Discussion on Rehabilitation Nursing of Patients with Post Injury in Clinical Emergency

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ABSTRACT In any case, preventing the injury of spinal before the application of the treatment for spinal injury has a positive significance. This can reduce or prevent the occurrence of the injury again. So, it reflects a very important significance treatment in the hospital. We use the pre-development and strictly followed the procedure of the spine injury and carry out the professional rescue procedure in the patients after the injury in order to obtain a very satisfactory result.

KEYWORDS

Rehabilitation nursing
Spinal injury
Clinical emergency

1. Introduction

Spine fractures are accounted for 5% to 6% of the whole body fractures. It is unstable fractures associated with spinal cord injury and at the same time often associated with fractures of limbs, brain, chest, abdomen, multiple organ injury. The injury is complex thus give high case of mortality rate. Timely and proper care and perfect nursing intervention with the correct rehabilitation nursing are conducive to the rehabilitation of patients with spinal injury.

2. First aid nursing

Respiratory tract care in spinal injury patients, oral, nasal and pharyngeal often have foreign body retention, or due to the mouth secretions, causing in breathing difficulties, and even suffocation and life-threatening. Therefore, we should promptly remove the foreign body or secretions, so that patients with respiratory tract unobstructed in order to ensure the safety of patients during transported to hospital for treatment.

When transporting patient from outpatient or emergency department into the room or ward with flat car, the method for removing the patients should be explained in order to achieve cooperation from patients. A total of 4 to 5 people are used in helping the patients and set the back-

board bed for patient with one hand or by helped the torso of a patient. Besides, make the whole body is integral rolling to a hard bed. Again embraces the second helper to position at the patient's leg or to the end result of torsional buckling of patients with spinal lift. Before and after the rotation, the patients were asked whether there were a feels any difference between the two legs, and to check whether there is any changes on muscle strength.

Nursing care: Most of the patients with spinal cord injury are young adults. Even though, the sudden injury to their own and family caused by the cruel blow, followed by a heavy burden to family and society, the psychological care is more important [1]. Patients may have a fear, anxiety, nervousness and other psychological reactions, and even suicide as a result of giving up treatment. We should be concerned about patients comfort patients. For conscious patients, a brief introduction about the illness and precautions to eliminate the tension. In order to get trust from the patient and family members, always cooperate with them when handling the patients. In order to introduce the successful treatment, encourage their positive attitude towards life, courage to face the reality, and actively cooperate with the treatment so that the safety of the hospital is guarantee. On the front and back of the spinal cord, strictly keep the patient's head, neck, chest, waist, abdomen in the same axial direction combined craniaocerebral injury patients dysphoria. Stability and muscle injection were applied to the patients whose with brain injury and restless, according to the doctor's advice. Strengthen en route surveillance. Close observation of changes in the patient's vital signs by observing the patient's facial expression, conscious patients, asking any discomfort experienced by patient, in order to understand the injury and to identify the problem and give a timely treatment. Timely the sputum sucked out in order

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to keep the airway is open so that patients maintain a good ventilation condition and line endotracheal intubation on the way to do good corresponding nursing.

3. Pre-operative nursing

3.1. Pre-operative nursing

General care for patients with spinal fractures illness development is rapid. It can be a shock in a relatively short time, at any time in patients with life-threatening. Immediately, after admission, the patient was given warm to oxygen, and establishing of venous pathway, fluid infusion, improve microcirculation and cross matching blood. However, when patients are suspected with other organ damage, immediately consult to the relevant departments. Closely observation of the condition is needed where the early focus on the observation presence of life-threatening hemorrhage. In addition, a detailed observation of the existence of certain organs hidden damage is necessary as well as timely communication with doctors who have the right to determine the symptoms and signs of mutual influence, the predictability of measures and to do a good job in front of the preparatory work [2].

Strengthening of psychological care patients is by providing psychological counseling and support. Besides, establishing a good relationship with patient to enlighten the patient by telling them the safety and reliability consideration after the surgery patients and inform the post-operative matters needing attention in order to eliminate the psychological tension of the patient as well as actively cooperate with the treatment.

Stabilize the spine with absolute bed rest and appropriate bed hardness to maintain the correct decubitus except for necessary living care. Furthermore, minimizing the patients activity and reduce the patient's symptoms and pain are required in order to prevent reoccurrence of spinal cord injury.

3.2. Post-operative nursing

After anesthesia, the patients were taken to the pillow supine position, head to one side, in order to facilitate the outflow of oral secretions. When necessary keep respiratory tract unobstructed by maintaining the airway patency. Monitoring the changes of vital signs and full attention is needed to the patients with conventional oxygen blood temperature. Observing the patients with lower extremity blood supply, aware double foot has no bruising and foot dorsal artery pulsation is good. In addition, keep an attention to both lower extremities sensorimotor abnormalities, whether self, or not self-urination by keep indwelling catheter. When open the catheter and having found the nerve compression symptoms promptly report to the physician administered.

Drainage tube care is required for spinal surgery trauma where more bleeding is suspected, so often placed the drainage tube in order to prevent the formation of hema-

toma compression of spinal cord and muscle hematoma. This is adhesion effect of surgical. After the operation, the drainage tube is connected with the drainage bag, keeping the drainage unobstructed, avoiding the pipe distortion and pressure, and careful recording the amount of fluid drainage, shape and color of the drainage fluid. After operation, the drainage tube was less than 30 to 50 mL/d and was removed after 3 days.

Due to intraoperative traction after operation, the effect of spinal cord were observed whether the spinal cord is injured or there were destruction of blood supply of spinal cord or epidural hematoma compression occurred which caused by spinal cord injury (SCI). If the patients complained of numbness of the limbs, movement disorders, and the sphincter dysfunction, should be immediately reported to the doctor in time.

(1) The prevention of complication of urinary system infection: During the period of indwelling catheter, patients are advised to drink plenty of water to ensure water volume of 2000 mL/d or more in order for flushing of the bladder and urethra clean for twice daily. Regularly check the urine routine, urine culture and apply reasonable antibiotics. Around 2–3 weeks after the start of training of bladder function, open clipping catheter once for every 3 to 4 hours for filling of bladder, and prevent the contracture. (2) Preventing respiratory tract infection: due to anesthesia intubation to stimulate the respiratory tract, it will cause mucosal edema, increased secretion and incision the pain. At this time, patients cannot cough. However, consuming grinding machine for a long time will make easy to cause hypostatic pneumonia which is a pulmonary complications. Therefore, patients should be encouraged to cough, turnover and pat on the back and encourage taking a deep breath. A sticky sputum is spotted after underwent atomization inhalation. Next, assisting patients during expectoration while maintaining oral hygiene is good for oral care. (3) Thrombophlebitis is always occurring with long-term bedridden patients where less activity of the patient with poor blood return to the leg. Strengthen the protection should be taken care by raising lower limb around 15 to 30 degrees with ankle dorsiflexion movement, so as to avoid the occurrence of thrombosis and thrombophlebitis. (4) The prevention of pressure ulcers and abdominal distension and constipation: turn over for every 2–3 hours/times and massage pressure parts in order to promote local blood circulation. In addition, pay attention to the quality and quantity of patients' diet by advising to eat more fresh fruits and vegetables, drinking more water, in order to facilitate the smooth stool. The used self-abdominal massage is necessary so as to prevent abdominal distension and constipation [3].

Spinal rehabilitation exercise training for nurses and their families. The back suspension method is when patients lying in bed where chest and two cubits from the chest are hanging back. This method is for post injury re-

habilitation; (1) Five-point supporting method: patient supine, hands, elbows and two legged support from the body, so that the back best vacated after the extension, usually start this method after 2 weeks of the injury. (2) Three-point supporting method: let the patient with arms chest, with head and foot propped up on the bed, the whole body vacated after extension, generally after 3 weeks of injury began. (3) Four-point supporting method: with both hands and feet propped up on the bed, the whole body is vacated. This an arch-shaped wound after 3–4 weeks after practicing this method. (4) The ridge stretching method: patients prone, raised his head and chest out of bed, two upper limbs to the back stretch, knees straight from bed lifted his legs hurt after 5–6 weeks. The amplitude and frequency of exercise should be gradually increased, in the case of no increase in fatigue and pain. In order to master the correct operation, it is important not to implement a strong manual pull and other passive activities.

4. Discussion

The key point of nursing care is to avoid further damage, prevent complications, and to play a positive role in clinical treatment and nursing care. Through clinical practice experience, we recognize that (1) First aid can save the patient's life and avoid further damage. (2) Good primary care is a key to prevent any complications. (3) Functional exercise is an important measure to promote physical rehabilitation. Therefore, it is essential to have a correct first aid. Improvement of patient's perioperative of spinal fracture surgery patients is very important whereby slightly omissions could bring serious complications to patients, nurses must have careful observation with intensive care in order to ensure a good therapeutic effect. Correct fixation and handling is the key. If the handling method is not correct with spinal cord injury patients, it can cause secondary damage where aggravate the spinal cord injury and lead to oppression thus allowing patients to paralysis and even death. Therefore, the correct handling method is particularly important in the first aid and nursing process. First, emergency center received a suspected spinal injury patient with alarm call. The dispatcher should first tell witnesses not at liberty to move patients in order to avoid witnesses to take the blind or incorrect handling which may lead to new accidental damage [4].

Secondly, in a way to site of injury person the emergency personnel should also contacted by telephone and diagnosis, again the site personnel cannot move patients as may causing some stresses to patients. If site conditions are in urgent need of shifting patients, telephone guidance should

be considered by site-personnel for proper handling to avoid any new damages to the patient. After the ambulance arrived at the scene, the hospital emergency medical staff should have a high degree of responsibility and keen powers of observation. A certain degree of predictability and certain analysis ability are required to make quick judgments according to the different clinical symptoms. First of all, the life-threatening conditions such as respiratory and cardiac arrest, respiratory depression are required in order to quickly make the appropriate rescue treatment. The patient is then placed in the correct position with reasonable fixation, and finally carries out with the smooth and safe transportation. Strengthen psychological nursing. Spinal cord injury patients are mostly young adults, each projecting it to themselves and their families for injuries caused by cruel blow to their families and themselves. In addition, fear, anxiety, nervousness and other psychological reaction are another problem facing by patient followed by the family and society bring heavy burden an even now suicide as a result of giving up treatment [5].

Our intention is to take care for the patient and the family members of the patients by the introduction of successful medical records in order to obtain the cooperation of patients and their families. This way will helps the patient and their family able to reduce their fears, enhance self-confidence, actively cooperate with the treatment, and encourage them to face life with a positive attitude. To ensure the safe delivery of the hospital, it is necessary to observe the changes in vital signs, including body temperature, pulse, respiration, blood pressure, feeling, reflection, etc., especially breathing, attention to the frequency of changes in the chest or abdomen breathing, as well as to grasp the dynamic information of the state of the disease.

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